

## **REMARKS**

Reconsideration of this application, as amended, is respectfully requested. Claims 1, 11 and 20 have been amended to clarify that multi-dimensional parameters of data values require more than one value to describe such parameters. Support for these amendments may be found in the specification as filed, for example at paragraph 18. No new matter has been added.

The typographical error in claim 11 has been corrected, hence, the objection under 35 USC 112, second paragraph should be withdrawn.

The rejection for obviousness-type double patenting in view of co-pending application 10/851,276 is noted. Should the claims, as amended, be found allowable but for such obviousness-type double patenting an appropriate terminal disclaimer will be filed.

The present claims are patentable over Lim, US 5,339,164, even when considered in view of Sah, US 2003/0028509 and/or Uchibayashi, US 2003/0133169. Lim describes an image encoding scheme in which quantization is used to reduce the number of bits needed to describe a data value. See, Lim at col. 4, ll. 2-34. As noted by Lim (and cited the Office Action), quantization is a many-to-one process. However, such quantization is not equivalent to the presently claimed process of mapping multi-dimensional parameters of data values, each of which parameters requires more than one value to describe it, to respective one-dimensional parameters.

Instead, quantization is a process in which information content of a parameter is reduced by artificially forcing a first range of values describing that parameter to a fewer number of such values. See, Lim at col. 4, ll. 2-9. The “space” defining that parameter is not, however, altered. It is merely made less distinct by reducing the number of individual bits used to describe that space.

Such quantization then is distinctly different than the processes presently claimed, in which each multi-dimensional parameter is described by more than one value and it is the multi-dimensional nature of these parameters (and not merely the number of bits describing same) which is mapped to respective one-dimensional parameters. Stated differently, while Lim may be said to describe a process in which the number of bits describing values of parameters are

reduced (but leaving the dimensionality of such parameters unchanged), the present invention maps multi-dimensional parameters to one-dimensional representations thereof.


Adding the teachings of Sah and/or Uchibayashi to those of Lim does not cure this deficiency. Sah is cited for describing a run length encoding process in which redundant data values share common table entries. Even if true, however, such data values according to Lim would not be one-dimensional representations of multi-dimensional parameters, as claimed. Hence, the claims are patentable over the combination of Lim and Sah.

Uchibayashi is cited for describing data values having parameter values that are similar to one another within a tolerance range. Even if true however, such data values according to Lim and Sah would not be one-dimensional representations of multi-dimensional parameters, as claimed. Hence, the claims are patentable over the combination of Lim, Sah and Uchibayashi .

If there are any additional fees due in connection with this communication, please charge Deposit Account No. 19-3140.

Dated: 2/10, 2006

Respectfully submitted,  
SONNENSCHEN NATH & ROSENTHAL LLP

  
Tarek N. Fahmi  
Reg. No. 41,402

P.O. Box 061080  
Wacker Drive Station  
Sears Tower  
Chicago, IL 60606-1080  
(415) 882-5023